DIRECT TESTIMONY OF
MICHAEL D. SHINN
ON BEHALF OF
DOMINION ENERGY SOUTH CAROLINA, INC.
DOCKET NO. 2021-2-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT POSITION.

A. My name is Michael D. Shinn, and my business address is 400 Otarre Parkway, Cayce, South Carolina 29033. I am currently employed by Dominion Energy South Carolina, Inc. ("DESC" or "Company") as Manager - Fuel Origination and I am responsible for managing the Fuel Procurement and Asset Management Department ("Fuel Department").

Q. PLEASE BRIEFLY SUMMARIZE YOUR DUTIES WITH DOMINION ENERGY SOUTH CAROLINA, INC.

A. My responsibilities include managing the purchase and delivery of coal, No. 2 fuel oil, and limestone on behalf of the Company and as an agent for South Carolina Generating Company ("GENCO").

Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND YOUR BUSINESS EXPERIENCE.

A. I earned a Bachelor of Science Degree in Mechanical Engineering from the University of South Carolina in Columbia, South Carolina, in 1995. While in college, I was a student intern in the Fossil Hydro Power Plant Performance Group for five years. Since graduation, I have held various positions within the Fuel Department, including managing rail transportation and delivery, spot coal purchasing, coal quality management, synthetic fuel optimization, and state and federal regulatory reporting. While Manager of Fuel Technical Services, Industrial Coal and Synfuel, I worked with coal suppliers and DESC's power plants to increase fuel and transportation flexibility as well as to maximize the utilization of the Company's assets. In December 2009, I was promoted to General Manager of the Coal and Oil Procurement Department, and in January 2021, I assumed my current position.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe the procurement and delivery activities for coal and No. 2 fuel oil used in electric generation for DESC as well as GENCO's Williams Station for the period January 1, 2020, through December 31, 2020 (the "Review Period"). I also discuss changes that have occurred in coal markets since the last annual fuel adjustment hearing and how these changes affected coal procurement during the Review Period. My testimony also describes the procurement and delivery of limestone for our wet scrubbers located at the Wateree and Williams steam plants.

Q. PLEASE DESCRIBE GENCO AND ITS RELATIONSHIP TO DESC.

A. GENCO was incorporated on October 1, 1984, and owns A.M. Williams Electric Generating Station ("Williams Station"). GENCO sells to DESC the entire generation output from Williams Station under a Unit Power Sales Agreement approved by the Federal Energy Regulatory Commission. Hereafter, when I refer to DESC's non-nuclear steam generation plants, I include GENCO.

COAL, NO. 2 FUEL OIL, AND LIMESTONE PURCHASING

Q. PLEASE SUMMARIZE DESC'S FUEL PROCUREMENT NEEDS AND PURCHASING PRACTICES FOR DESC'S NON-NUCLEAR POWER GENERATION PLANTS.

A. The Fuel Department purchases all coal, No. 2 fuel oil, limestone, and associated transportation for DESC's non-nuclear power generation plants focusing on reliability of supply, conformity with operational and environmental requirements, and reasonable prices.

Q. WHAT WAS THE BURN RATE FOR COAL IN 2020 AND WHAT DO YOU EXPECT THE BURN RATE FOR COAL TO BE IN 2021?

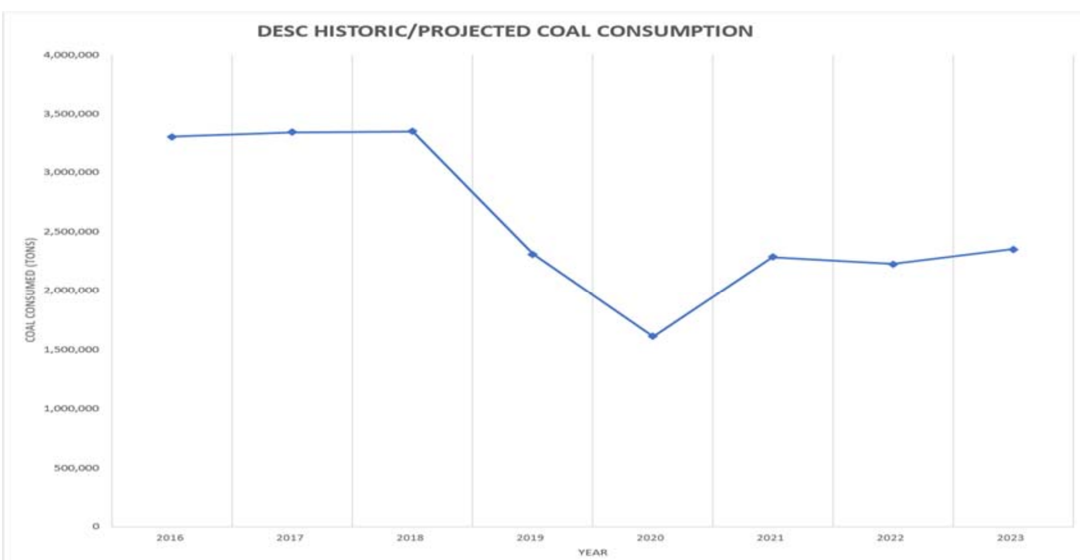
A. In 2020, DESC consumed 1,614,112 tons of coal in the production of electricity for its customers. This amount was 30% lower than the amount of coal consumed in 2019.

The Company projects that its burn rate for coal in 2021 will be approximately 2,340,291 tons. This projected burn rate is based on normal weather, the Company's projections of coal and natural gas prices, and the economic dispatch of units.

The following graph in Figure 1 illustrates the change in coal consumption since 2016 and the predicted consumption through 2023.

Figure 1

Coal Consumption 2016 to 2023



Q. HOW DOES THE COMPANY SECURE NECESSARY QUANTITIES OF COAL AND NO. 2 FUEL OIL AT COMPETITIVE PRICES?

A. Coal is procured under long-term (more than one year) and spot purchase (up to one year) agreements to achieve a balance of reliable supplies while maintaining flexibility to react to market changes or short-term system needs. Under historic market conditions, DESC seeks to have long-term purchases represent approximately 60% to 80% of projected system demand. Spot purchases provide a mechanism to manage inventories and react to short-term changes in the marketplace, and generally represent 20% to 40% of projected system demand. Broadly, the Company is altering its practices regarding long-term versus short-term coal procurement contracts to reflect a reduction in demand for coal-fired generation.

In contrast to the complexities of coal purchasing contracts, contracts for No. 2 fuel oil are requirements contracts that are competitively solicited every two years. Generally, pricing for these contracts is based upon market indices that are adjusted daily.

DESC maintains an active list of qualified suppliers of coal and No. 2 fuel oil. Typically, as contracts expire or needs are identified, solicitations are issued for competitive sealed bids. Responses to these solicitations inform our knowledge of market demand and prices. Moreover, because the responses to these solicitations often include proposals for coal supplies with specifications different than the requested specifications, these responses also aid our ongoing efforts to ascertain price differences for varying qualities of fuels.

Q. PLEASE SUMMARIZE THE COMPANY'S COAL PURCHASES DURING THE REVIEW PERIOD.

A. The Company took delivery of 1,244,314 tons of coal under long-term agreements and 185,628 tons of coal through spot purchases during the Review Period. As a whole, long-term agreements provided 87% of the requirement for the Company's coal-fired stations, while spot purchases accounted for the remaining 13% of DESC's coal requirements during 2020. In total DESC received 1,429,942 tons in 2020 in contrast to the 2,495,368 tons received in 2019. This 43% decrease shows the impact of low natural gas prices, extended plant maintenance outages and milder than normal weather and the importance of a flexible supply base. In summary, operational considerations, weather, fuel market conditions, and economic dispatch of the Company's generating assets combined to impact DESC's balance of coal purchases in the Review Period, driving the Company to rely more heavily on short-term agreements to meet its requirements for coal.

Q. FOR 2021, PLEASE EXPLAIN THE COMPANY'S PLANS FOR ADDRESSING ITS NEEDS FOR COAL SUPPLIES UNDER LONG-TERM CONTRACTS AND SPOT PURCHASES.

A. DESC anticipates soliciting suppliers of coal for additional long-term contracts in 2021. The Company currently has contracts in place that are projected to meet a balance of approximately 70% of coal supplies through long-term contracts and approximately 30% through short-term contracts in 2021. However, this balance may not be achieved because of market conditions, weather, and operational considerations. The Company plans to maintain the flexibility to manage its coal inventories and purchase the most competitively priced fuel being ever mindful that its burn rate has the potential to fluctuate widely due to market conditions and changes in the price of coal or natural gas which may result in imbalances of fuel supply and demand. In sum, the Company will continue to evaluate market conditions carefully, always seeking to purchase coal supplies for our customers at economically reasonable prices while ensuring that the Company's service commitments are reliably and prudently met.

Q. HOW MUCH COAL DOES DESC PLAN TO PURCHASE IN 2021 UNDER LONG-TERM CONTRACTS?

A. DESC currently has long-term contracts with six suppliers for the delivery of 1,662,667 million tons of coal. This quantity represents 70% of DESC's expected total coal receipts for 2021. The coal purchased under these contracts ranges in quality from 12,500 to 12,700 British Thermal Units ("BTU") per pound and from 1.00% to 1.63% sulfur content. These contracts are for an initial period of two to three years, and some of the contracts have options to renew. The amount of coal under contract will vary from year to year, and the contract terms will vary from contract to contract.

During 2021, the Company will continue to carefully evaluate its need for coal in future periods. We anticipate that DESC will negotiate additional commitments for coal supply for 2021 and beyond seeking to maintain a reasonable balance between coal supplied under long-term contracts and spot purchases while obtaining coal at reasonable prices and ensuring that the Company's supply requirements are reliably and prudently met.

Q. FOR 2021, PLEASE EXPLAIN THE COMPANY'S CURRENT PLANS FOR ADDRESSING ITS NEEDS FOR COAL SUPPLIES UNDER SHORT-TERM CONTRACTS.

A. The Company currently has spot contracts with five suppliers for the delivery of 401,339 tons of coal. This quantity represents 17% of DESC's expected total coal receipts for 2021. The timing and occurrence of the remainder of the Company's expected short-term coal purchases in 2021 of 13% (100% - (70% long-term + 17% short-term) = 13%) will be heavily dependent on weather and the generation produced at the other generation assets employed by DESC. The Company will make additional spot or long-term purchases as needed to ensure that enough supply is available for its electricity generation needs at a reasonable price. Acquiring coal supplies in this manner will provide DESC with the flexibility to manage its generation assets in the most cost-effective way, which can vary from month to month.

Q. GIVEN THE STATE OF THE DOMESTIC COAL MARKET, WILL SUFFICIENT SUPPLIES OF COAL BE AVAILABLE ON THE SPOT MARKET TO MEET THE COMPANY'S GENERATION NEEDS?

A. With utilities across the country decommissioning coal plants and relying more heavily on natural gas generation facilities, the demand for coal in the domestic market will, overall, be reduced unless an export market develops. Export coal demand was reduced for most of 2020 but the market was showing increased interest in shipments of coal during the waning months of 2020 and entering 2021. Given this market climate, coal suppliers continued production, but at diminished levels and with less capacity to increase production if needed due to increased demand. While the Company does not anticipate that these market conditions will change in the short-term, the trend for coal production in our supply areas will continue to decrease. Current supply forecasts indicate coal supplies will remain available but may be limited depending on international demand.

Q. HOW DOES DESC ENSURE THAT THE RIGHT QUANTITY OF FUEL SUPPLIES IS AVAILABLE TO MEET GENERATION DEMANDS AT ITS NON-NUCLEAR POWER GENERATION FUEL FACILITIES?

A. DESC uses several steps to bring the fuel supply and demand factors together. Fuel usage levels are calculated and forecasted for each of the generating plants. Coal and No. 2 fuel oil inventories are then validated, and contract quantities are summed and compared against projected system usage to determine needs going forward. With this information, the Fuel Department carefully evaluates the Company's coal requirements and determines whether transportation options under current contracts, spot purchases, or additional long-term agreements are appropriate. Through this process, DESC has been successful in leveraging long-term and short-term coal purchases to achieve reasonable purchase prices while ensuring the reliability of coal supplies necessary to support system needs.

No. 2 fuel oil is purchased to ensure adequate back up to natural gas for DESC's intermediate and peaking generators. Typically, fuel storage tanks are filled going into peak usage periods.

Q. HOW DOES THE COMPANY DETERMINE A "REASONABLE PRICE" FOR COAL AND NO. 2 FUEL OIL PURCHASES?

A. The Fuel Department works diligently to achieve an optimization between adequate fuel supplies of acceptable quality at reasonable purchase prices. The ultimate value of the delivered fuel (coal or No. 2 fuel oil) is determined by the actual delivered cost per Million British Thermal Units ("MMBTU"), accounting for any fuel impacts in the operation of our generating plants. Market prices fluctuate due to such things as seasonality, political turmoil, national weather trends, and domestic/international supply/demand imbalances. DESC continuously evaluates factors that impact prices, while employing contract strategies such as predetermined price adjustments and quarterly adjustments to mitigate the effect market conditions have on coal contracts. Market publications, indices, industry solicitations, trade associations, and interacting with market participants are some of the sources and methods that we use to stay abreast of market trends and conditions.

Q. HOW DOES THE COMPANY MANAGE COAL INVENTORIES TO ENSURE RELIABILITY AND AVAILABILITY?

A. To maintain adequate supply at its coal-fired generating facilities, the Company continuously manages inventories using long-term contracts, spot market purchases, and transportation options. The Company used these tools in support of its efforts to maintain an inventory of approximately 680,125 tons of coal during the Review Period based on the average of each of 12 months' ending inventories to support anticipated consumption during the Review Period and to maintain enough coal to run each coal unit at full capacity for approximately 45 days. This methodology allows for an inventory of more than 680,125 tons at the beginning of high demand periods and less than 680,125 tons entering the milder months. This targeted inventory level aids in protecting DESC and its customers against lack of coal availability as well as against production and delivery problems that may arise from time to time. The coal inventory is also an immediately available resource to meet our supply needs when short-term market prices are unfavorable, natural gas availability issues arise, or a lack of solar generation occurs. A crucial aspect of the Company's inventory management is balancing its short-term needs against long-term requirements and expected future operating conditions.

Q. PLEASE PROVIDE AN OVERVIEW OF TRANSPORTATION SERVICES DURING THE REVIEW PERIOD.

A. In 2020, CSX Transportation, Inc. ("CSX") remained the primary rail transporter of coal for DESC. The CSX contract rates were subject to quarterly adjustments according to indices published by the American Association of Railroads and will remain under the current contract until February 28, 2021. Renegotiation of the current contract is in progress, and DESC is comparing and evaluating its viable options for transporting the coal it needs to operate reliably at market prices.

Q. DOES DESC HAVE ACCESS TO INTERNATIONAL COAL SUPPLIES?

A. Yes. Although the Company did not receive any deliveries of international coal during the Review Period, DESC has the capability, through existing utility-business partnerships, of obtaining and transporting imported coal to its coal generation facilities on a spot or as-needed basis when prices for international coal are competitive with domestically produced coal.

Q. PLEASE DESCRIBE THE STATE OF THE INTERNATIONAL COAL MARKET IN WHICH DESC PARTICIPATES AND ITS CURRENT PLANS REGARDING IMPORT COAL.

A. International coal prices have risen over the Review Period. The market for coal on the API 2 index began the year at $55.90 per ton and ended the year at $69.05 per ton. The Company continues to monitor the market for use of international coal in DESC's system, but the current domestic market precludes its use at this time. The demand for Metallurgical coal in the international market from U.S. ports ended 2020 stronger than last year due mostly to the Chinese shift toward non-Australian coal. There was also increased demand for Northern Appalachian and Illinois Basin coal due to a colder winter in European Markets. Natural gas/LNG production issues also led to decreased availability and higher prices which encouraged coal consumption.

DESC will continue to monitor and remain informed of opportunities to purchase international coal as part of its ongoing effort to reduce fuel costs for both DESC and its customers and to ensure that an adequate supply of coal is available to meet its generation needs.

Q. WHAT WERE DESC'S DELIVERED COAL COSTS FOR THE REVIEW PERIOD?

A. DESC's average delivered cost in dollars per MMBTU by month for coal purchased for steam plants during the Review Period is set forth in Table 1.

Table 1

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
$3.28	$3.53	$3.50	$3.64	$3.69	$3.71	$3.42	$3.71	$3.87	$3.55	$3.39	$3.49

Q. WHAT CHANGES DOES THE COMPANY ANTICIPATE IN THE COAL MARKET FOR THE 2021 FORECASTED PERIOD?

A. DESC's coal prices for the forecasted period are expected to fluctuate around current levels depending on DESC's need for spot coal. Over the past 12 months, the price per ton of Central Appalachian ("CAPP") coal has fluctuated. It began the year at $48.00 per ton before decreasing to $34.25 per ton on June 19, 2020, and then settling at \$50.75 per ton on December 31st, 2020. Spot coal prices have been stable in January 2021 at approximately \$52.00 per ton.

The CAPP coal market continues to be impacted by dwindling demand caused by coal plant closures, diminished export markets, increased mining expenses, coal supplier bankruptcies, a severe lack of capital resources, and low-cost natural gas. The current prices for thermal CAPP coal are inadequate for most remaining producers to be able to attract investors and produce our typical specification.

These mounting issues combined with environmental concerns have led to a much more limited ability to borrow money for recapitalization of mines in general, and to the inability of mining companies to acquire new mining permits. These factors will continue to put upward pressure on coal production costs during 2021 and will ultimately result in more consolidation, bankruptcies, and little to no investment in future supply assets. Notwithstanding these upward pressures, the Company expects coal prices will remain stable until demand increases or supply decreases below demand. Current production is adequate to meet anticipated demand and supply expected to be obtainable. For any significant increase in demand by industry or the export market there will be limited capability for supply sources to respond. This is not only on the coal production side but with transportation providers as well. This risk is partially mitigated by keeping a robust inventory entering peak seasons.

Q. WHAT ADDITIONAL STEPS IS THE COMPANY TAKING TO REDUCE FUEL-RELATED EXPENSES?

A. DESC continuously tries to reduce its fuel costs by purchasing coal of lower quality where practicable and acceptable to a coal-burning plant. During 2020, DESC elected to take delivery of coals purchased mainly from the Central Appalachia region in order to service our base contracts. Due to reduced coal burn at our plants and extended plant outages, DESC was unable to purchase any Northern Appalachia coal. DESC will continue to explore ways to reduce fuel costs while maintaining reliability and managing quality.

Q. WHAT HAS BEEN THE RECENT PRICING TREND IN THE NO. 2 FUEL OIL INDUSTRY?

A. Delivered No. 2 fuel oil average monthly prices during the Review Period ranged from a high of $14.29 per MMBTU in January to a low of $7.76 per MMBTU in April. With the vast shale resources that have come online in the U.S., the cost of fuel oil is expected to remain stable.

Set forth below is Table 2, which shows the average system delivered No. 2 fuel oil prices in dollars per MMBTU for the Review Period that was purchased for steam plants, gas turbines, and combined cycle units.

Table 2

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
$14.29	$13.45	$8.63	$7.76	$7.98	$9.43	$10.07	$10.23	$8.97	$9.02	$9.19	$10.90

Q. WHAT RESPONSIBILITIES DOES THE FUEL DEPARTMENT HAVE WITH RESPECT TO SO_2 AND NO_X ALLOWANCES?

A. The Fuel Department purchases or trades EPA sulfur dioxide (“SO_2”) and nitrogen oxides (“NO_x”) emission allowances as needed by DESC to compensate for its SO_2 emissions. However, DESC currently is emitting less than its SO_2 and NO_x emission allowances allocated to it by the EPA. For this reason, the Company was not required to purchase SO_2 and NO_x emission allowances. The Company also does not anticipate having to buy any SO_2 or NO_x emission allowances in 2021.

Q. PLEASE EXPLAIN THE FUEL DEPARTMENT’S ACTIVITIES RELATED TO THE PROCUREMENT OF LIMESTONE FOR DESC’S POLLUTION CONTROL FACILITIES.

A. The Fuel Department is responsible for securing adequate and reliable supplies of limestone for the effective operation of wet limestone scrubbers at the Company’s Wateree and Williams Stations. There continue to be limited local suppliers for limestone; however, despite some prior delays in the anticipated in-service date, a new quarry is expected to come online in the Georgetown area during

2022. The Company acquired all of its supplies of limestone from a single source during the Review Period, which has proven to be effective and market priced.

The limestone is delivered to Williams and Wateree Stations by truck since the current source of supply is located near the plants. In summary, the Company continues to evaluate supply and transportation options designed to ensure adequate and reliable supplies of limestone at reasonable prices at its Williams and Wateree Stations.

CONCLUSION

Q. WHAT REQUEST DOES DESC MAKE OF THE COMMISSION IN THIS PROCEEDING?

A. The Fuel Department has made reasonable and prudent efforts to obtain reliable, high quality supplies of coal, No. 2 fuel oil, and limestone and associated transportation at the lowest possible cost to DESC's customers. Therefore, on behalf of DESC, I respectfully request that the Commission find that the Company's fuel purchasing practices were reasonable and prudent for the Review Period.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.